

REMARKS

Claims 1 - 9 are pending in the present application. By this Amendment, new Figs. 3 - 7 have been added and the Brief Description of the Drawing section of the present specification has been amended to include brief descriptions for each of the new Figs. 3 - 7. It is submitted that new Figs. 3 - 7 do not constitute new matter and that no new matter has been added. It is respectfully submitted that this Amendment is fully responsive to the Office Action dated June 18, 2004.

Drawings:

On page 3 of the Action, the Examiner sets forth the following objection to the drawings:

The drawings are objected to under 37 C.F.R. §1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation that said correction reference signal generation means performs different types of correction reference signal generation processing in generating the reference signal, corresponding to the plurality of drive modes as claimed in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Similarly the limitation said correction reference signal generation means referring an address information relating to defective pixels in the vertical optional black pixel portion of the image pickup device must be shown or the feature(s) canceled from the claim(s).

The flowcharts shown in the attached Figs. 3 and 7 are submitted to make clear “the limitation that said correction reference signal generation means performs different types of correction reference signal generation processing in generating the reference signal, corresponding to the plurality of drive modes” and “the limitation said correction reference signal generation means referring an address information relating to defective pixels in the vertical optical black pixel portion of the image pickup device” as claimed in claim 1.

Fig. 3 is a flowchart for schematically showing the processing at the time of movie operation and still operation in the case of n-addition drive. Fig. 4 is a flowchart showing the processing operation in movie operation. Fig. 5 is a flowchart showing the processing operation in still operation. Fig. 6 is a flowchart showing the computation process of the correction reference signal in movie operation. Fig. 7 is a flowchart showing the computation process of the correction reference signal in still operation.

The processing operation shown in the flowcharts of the abovementioned Fig. 3 to Fig. 7 is based on the text of page 13, line 17 to page 21, line 3 of the specification of the application, and therefore does not contain any new matter. Accordingly, withdrawal of the objection to the drawings is respectfully requested.

As To The Merits:

As to the merits of this case, the Examiner relies on the newly cited reference of Heller et al. (U.S. Patent 6,396,539) in setting forth the following rejections:

- 1) claims 1, 4, 6 and 7-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki et al. (U.S. Patent No.: 6,084,634) in view of Heller et al. (U.S. Patent No.: 6,396,539);

- 2) claims 1, 4, 6 and 7-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki et al. (JP 09-135388) in view of Heller et al. (U.S. Patent No.: 6,396,539);
- 3) claims 2, 3 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki et al. (U.S. Patent No.: 6,084,634) in view of Heller et al. (U.S. Patent No.: 6,396,539) in view of (Applicant's admitted prior art);
- 4) claims 1, 4, 6 and 7-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki et al. (JP 09-135388) in view of Heller et al. (U.S. Patent No.: 6,396,539) in view of Carroll et al. (U.S. Patent No.: 6,160,578); and
- 5) claims 2, 3 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki et al. (U.S. Patent No.: 6,084,634) in view of Heller et al. (U.S. Patent No.: 6,396,539) Carroll et al. (U.S. Patent No.: 6,160,578) in view of (Applicant's admitted prior art);

Each of these rejections is respectfully traversed.

The invention of the application is characterized in that, as further clarified by the flowcharts of the abovementioned added drawing, drive modes (i.e., movie mode drive and still mode drive) and defective pixels within VOB pixel region are additionally considered in the smear correction processing.

With regard to the primary reference of Inagaki, the Examiner correctly acknowledges that “Inagaki does not disclose nor preclude referring on address information relating to defective pixels in the vertical optional black pixel portion of the pickup device”.¹

In order to compensate for the above-noted drawbacks and deficiencies of Inagaki, the Examiner relies on the teachings of the secondary reference of Heller.

More specifically, the Examiner asserts:

It is known in the art to store defective pixel locations in a memory such that those locations can be corrected upon reading out an image as disclosed by Heller (column 7, lines 49 – 57; column 8, lines 21 – 26 and 39 – 65; Figs. 5 and 6). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have referred to address information relating to defective pixels in order to correct the defective pixels.²

However, while Heller may disclose that address information of fault pixels in the effective area maybe stored, Heller is completely silent with regard to referring an address

¹ Please see, lines 15-16, page 4 of the Action.

² Please see, lines 17-21, page 4 of the Action.

information relating to defective pixels in the vertical optical black pixel portion of the image pickup device, as called for in each of independent claims 1, 4 and 8.

That is, Heller fails to disclose or fairly suggest that a black-level correcting signal is generated by referring to information of the defective pixels in the OB region.

In other words, Heller is directed to the fault pixel correction in effective pixel area, and only address information relating to such defective pixels is stored. Accordingly, there is no disclosure nor suggestion made therein with respect to referring an address information relating to defective pixels in the vertical optical black pixel portion of the image pickup device in the correction processing as defined in each of claims 1, 4, and 8 of the application.

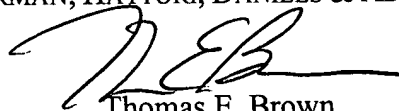
Therefore, it is submitted that the secondary reference of Heller fails to cure the above-note drawbacks and deficiencies of Inagaki and fails to render the present claimed invention obvious.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that that the claims are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

A handwritten signature in black ink, appearing to read 'TEB', with a stylized flourish extending from the end.

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Attachments: Submission of Four New Drawings Sheets (which include new Figs. 3-7).